

Title (en)

DISCHARGE METHOD, DISCHARGE SYSTEM AND SUBSTRATE PROCESSING APPARATUS INCLUDING THE SAME

Title (de)

ENTLADUNGSVERFAHREN, ENTLADUNGSSYSTEM UND SUBSTRATVERARBEITUNGSVORRICHTUNG DAMIT

Title (fr)

PROCÉDÉ DE DÉCHARGE, SYSTÈME DE DÉCHARGE ET APPAREIL DE TRAITEMENT DE SUBSTRAT LE COMPRENANT

Publication

EP 4134468 A1 20230215 (EN)

Application

EP 22189761 A 20220810

Priority

KR 20210107204 A 20210813

Abstract (en)

A discharge method includes discharging discharge products including a first discharge gas and solid by-products from a process chamber, in which a substrate processing process is performed in a vacuum state, into an inside of a collection device, collecting the solid by-products in the collection device, introducing a portion of a second discharge gas discharged from a load lock chamber into the collection device, and vaporizing the solid by-products in the collection device and discharging vaporized solid by-products to an outside of the collection device.

IPC 8 full level

C23C 16/44 (2006.01); **C23C 16/54** (2006.01); **H01J 37/32** (2006.01)

CPC (source: EP KR US)

B01D 51/00 (2013.01 - US); **B01D 53/1431** (2013.01 - US); **B01D 53/18** (2013.01 - US); **C23C 16/4412** (2013.01 - EP); **C23C 16/54** (2013.01 - EP); **G02F 1/1313** (2013.01 - KR); **H01J 37/32834** (2013.01 - EP); **H01J 37/32844** (2013.01 - EP); **H01L 21/67017** (2013.01 - US); **H10K 71/00** (2023.02 - KR); **H10K 71/311** (2023.02 - KR); **H10K 71/811** (2023.02 - KR)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

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